

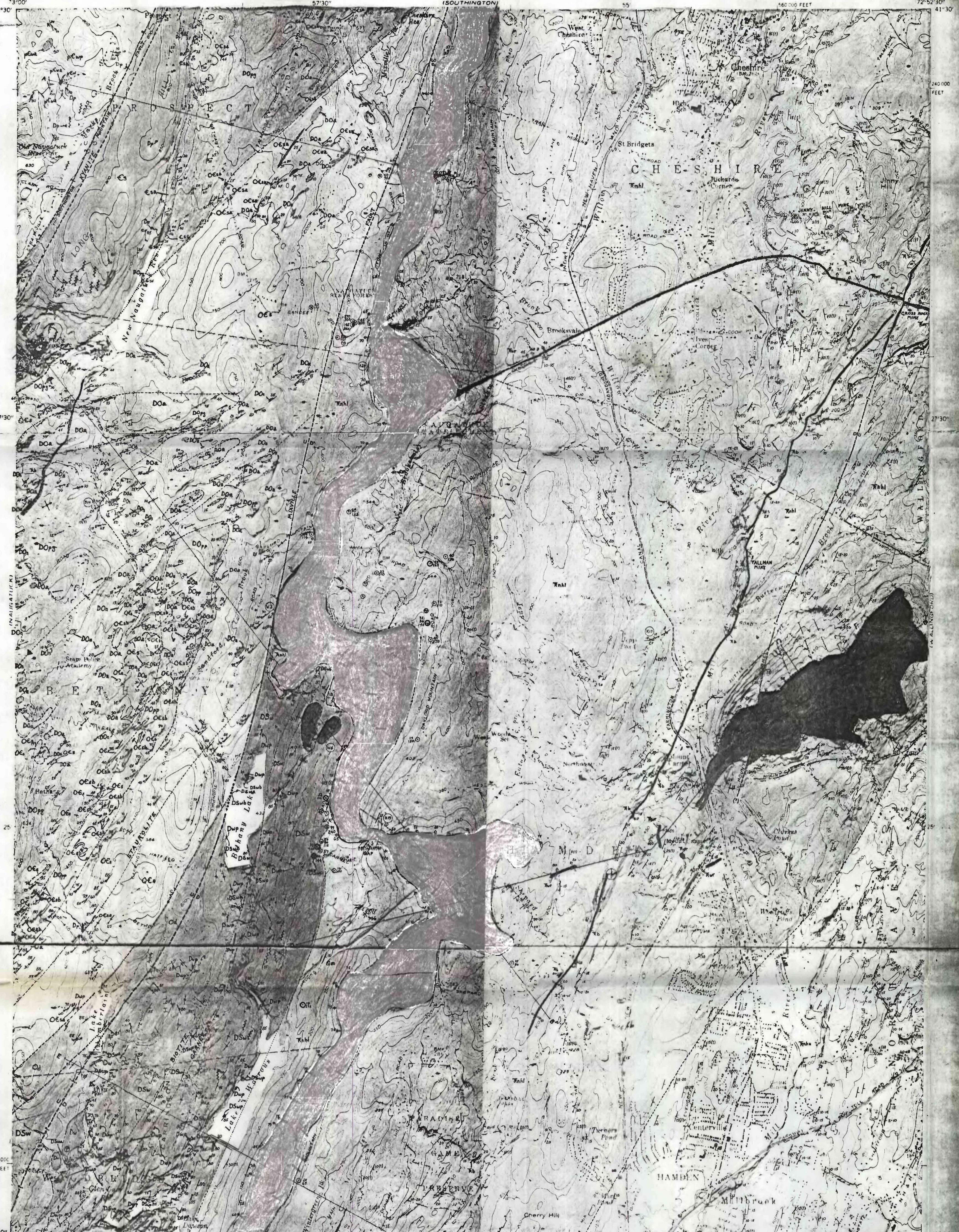
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with
THE STATE OF CONNECTICUT
GEOLOGICAL AND NATURAL HISTORY SURVEY

BEDROCK GEOLOGY
MOUNT CARMEL QUADRANGLE
CONNECTICUT

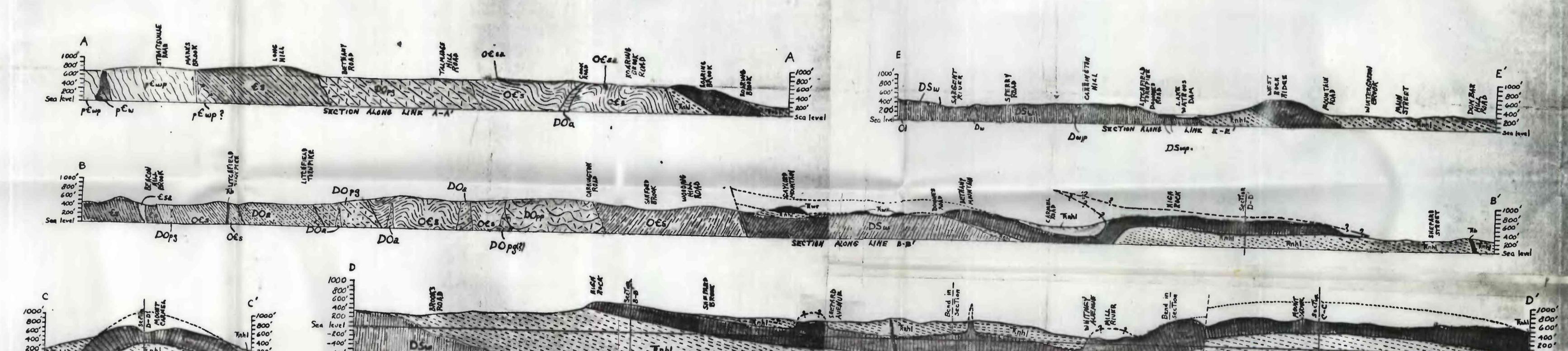
(2000)
R29d
No. 644

EXPLANATION



Base map by Topographic Division
U.S. Geological Survey, 1954

Geology mapped by Crawford E. Fritts in 1957 and 1958
assisted by Gilbert N. Syphax in 1957.

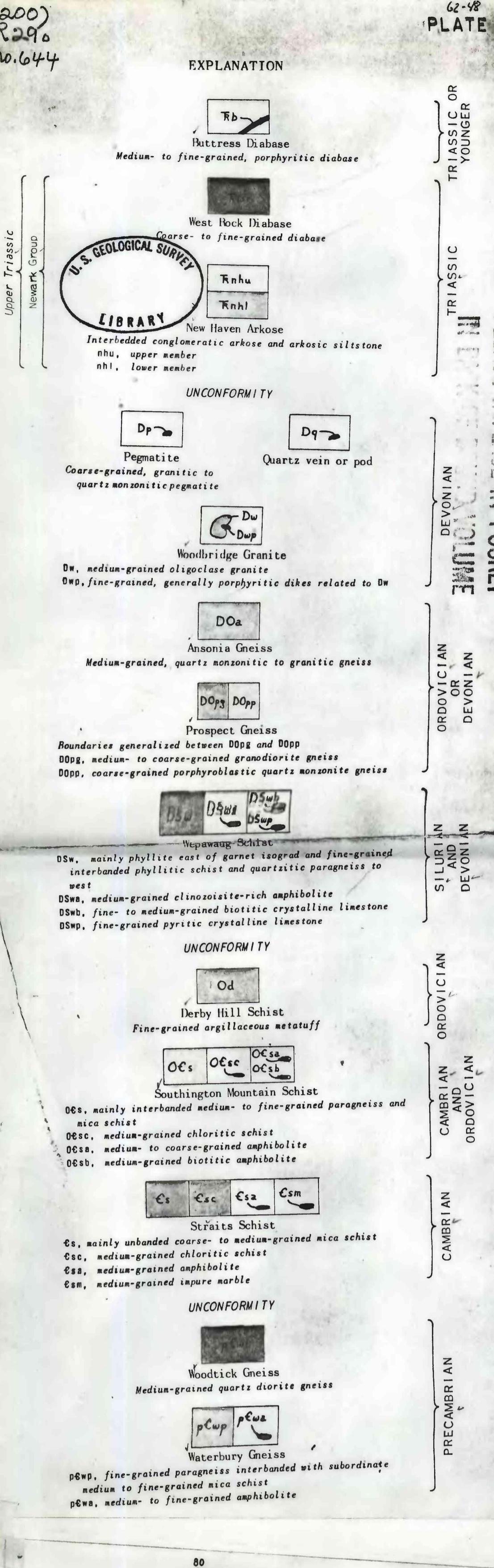


GEOLOGIC MAP
OF THE
MOUNT CARMEL QUADRANGLE, CONNECTICUT

BEDROCK GEOLOGY
By
Crawford E. Fritts
SCALE 1:24,000

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

This map is preliminary and has not
been edited for conformatity with Geological
Survey format



80
Contact, showing dip
Dashed where approximately located; short dashed where generalized, indefinite or inferred; queried where location, extent, or nature of contact uncertain.

0
Fault
Dashed where approximately located; short dashed where indefinite or inferred; queried where location, extent, or nature of contact uncertain. U, upthrow side; D, downthrow side.

foliation syncline
Showing trace of axial plane approximately located, and bearing and plunge of axis. Represents folded foliation rather than folded stratigraphic units.

PLANAR FEATURES IN SEDIMENTARY ROCKS
Inclined Bedding
Number indicates measured dip; queried where uncertain. Symbol for inclined bedding without number indicates strike and dip inferred.

PLANAR FEATURES AND LINEAR FEATURES
IN METAMORPHIC ROCKS
Foliation or flow cleavage
Formed by parallel alignment of minerals, such as mica in schist or gneiss. Generally about parallel to banding or relic bedding in banded metasedimentary rocks. Number indicates measured dip; queried where uncertain. Symbol for inclined foliation without number indicates strike and dip inferred.

Vertical Foliation or flow cleavage
Fracture cleavage
Formed by parallel or nearly parallel arrangement of axial planes of symmetrical crenulations or by alignment of long lines of asymmetrical crenulations in schist. Number indicates measured dip.

Inclined Vertical
Shear cleavage
Showing relative directions of displacement
Crumpled or contorted foliation and/or banding
Direction of long line indicates generalized strike
Inclined Horizontal
Lineation
Mineral lineation unless designated otherwise. G, crenulation axis. Number indicates plunge

LINEAR FEATURES IN DIABASE
Direction and plunge of joint column or line of intersection of two or more joints planes
Cross bar at point of observation. Symbol does not necessarily indicate that columnar jointing is well developed.

KYANITE Isograd
Denotes approximate eastern limit of zone in which named mineral (kyanite, staurolite, biotite, or garnet) is highest grade index mineral in metamorphic rocks of appropriate composition

Barite vein or series of veins, or breccia zone with barite-rich matrix
K Macroscopic-mineral localities
K, kyanite; S, staurolite

CF Locality where cut-and-fill structure visible in arkose
30+ Direction and plunge of axis of small foliation anticline
80 Small fault
Showing dip and relative directions of apparent lateral displacement

Abandoned quarry
x Prospect pit or shallow mine shaft
Adit
Trench

Group of prospect pits
Mine dump
Water wells
bedrock cuttings examined by writer; symbol may be combined with others

well passed through sedimentary rock into metamorphic rock

well in metamorphic rock
well in sedimentary rock
Single, larger of two, or largest of three numbers indicates depth to bedrock or number of feet of contact depth. Smaller of two or, if less, of three numbers indicates depth to bedrock or number of feet of contact between two different kinds of rock

Localities described by recent authors
K17, locality 17 of Kryne (1950); W2, locality 2 of Wheeler (1937); SI3, locality described by Stebbins (1935, p. 13)

Type locality